Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1-56. **(Canceled)**

57. **(Currently Amended)** An ~~The~~ isolated nucleic acid ~~of claim 54 having~~, the complement of which hybridizes to SEQ ID NO:1 under hybridization conditions of 0.5 M phosphate buffer, pH 7.2, 7% SDS, 10 mM EDTA, at 68°C, followed by three washes for 20 minutes each in 2x SSC, and 0.1% SDS, at 65°C;

wherein the isolated nucleic acid encodes a protein having dipeptidylpeptidase amidolytic activity;

wherein the isolated nucleic acid has a nucleotide sequence comprising SEQ ID NO:1; and

wherein the dipeptidylpeptidase amidolytic activity is defined as activity for cleaving the peptide bond between the second and the third amino acids from the unblocked amino-terminal end of a target polypeptide having an aliphatic or an aromatic residue as a substituent on the α-carbon atom of the second amino acid from the unblocked amino-terminal end of the polypeptide, with the proviso that the second amino acid from the unblocked amino-terminal end of the polypeptide is not charged.

58-73. **(Canceled)**

74. **(Currently Amended)** An ~~The~~ isolated nucleic acid ~~of claim 73 wherein the~~ comprising a nucleotide sequence having ~~has~~ at least about 95% identity with SEQ ID NO:1;

wherein the nucleotide sequence encodes a protein having dipeptidylpeptidase amidolytic activity; and

wherein the dipeptidylpeptidase amidolytic activity is defined as activity for cleaving the peptide bond between the second and the third amino acids from the unblocked amino-terminal end of a target polypeptide having an aliphatic or an aromatic residue as a substituent on the α-carbon atom of the second amino acid from the unblocked amino-terminal end of the polypeptide, with the proviso that the second amino acid from the unblocked amino-terminal end of the polypeptide is not charged.

75. **(Canceled)**

76. **(Previously Presented)** An isolated nucleic acid consisting of nucleotide sequence SEQ ID NO:1.

77. **(Canceled)**